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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,397	04/14/2005	Franciscus Johannes Klosters	NL02 1018 US	6217

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EXAMINER	
FLORES, LEON	
ART UNIT	**PAPER NUMBER**
2611	

NOTIFICATION DATE	DELIVERY MODE
02/07/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No.	Applicant(s)	
	10/531,397	KLOSTERS ET AL.	
	Examiner	Art Unit	
	Leon Flores	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☒ Claim(s) *6* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 April 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/14/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
(f) BACKGROUND OF THE INVENTION.
    (1) Field of the Invention.
    (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(g) BRIEF SUMMARY OF THE INVENTION.
(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(i) DETAILED DESCRIPTION OF THE INVENTION.
(j) CLAIM OR CLAIMS (commencing on a separate sheet).
(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Drawings

2. The drawings are objected to because drawings contain blank boxes and other shapes, which are not widely, recognized engineering symbols. Applicant must supply a suitable legend. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The following are direct quotations of 37 CFR 1.84(n), (o), repeated below:

> (n) *Symbols*. Graphical drawing symbols may be used for conventional elements
> when appropriate. The elements for which such symbols and labeled representations are used must be adequately identified in the specification.
> Known devices should be illustrated by symbols which have a universally recognized conventional meaning and are generally accepted in the art. **Other symbols which are not universally recognized may be used, subject to approval by the Office, if they are not likely to be confused with existing conventional symbols, and if they are readily identifiable**.
>
> (o) *Legends*. **Suitable descriptive legends may be used subject to approval by the Office, or may be required by the examiner where necessary for understanding of the drawing**. They should contain as few words as possible.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 6 is objected to because of the following informalities: In claim 6, the further limitation of "counter means for" should be rewritten as "counter for" to avoid any confusion since claim 6 is drafted as an apparatus claim and not as a "mean for" claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claims (1, 3, 5 & 7) are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (hereinafter Sato) (US Patent 5,596,582) in view of Pohlmeyer et al. (hereinafter Pohlmeyer) (US 2002/0101884 A1)**

Re claim 1, Sato discloses a data processing apparatus, for receiving a communication signal that comprises a message containing a sync break interval with a unique bit pattern, the message containing a sync field interval identified by the sync break interval, a timing property of the sync field interval specifying a length of bit periods of the message, the apparatus comprising

an input port for receiving the communication signal (See fig. 7: 31 & col. 8, lines 16-22); a reception circuit for sampling and processing bits from the message (See fig. 7: 51 & col. 8, line 23 "A/D").

But the reference of Sato fails to explicitly teach a clock source circuit for supplying a sampling clock signal to the reception circuit to define time points for said sampling, the clock source circuit being arranged to adapt a frequency of the sampling clock signal to the timing property of the sync field interval, as a condition prior to supplying the sampling clock signal at the adapted frequency specified by the sync field interval identified by the potential sync break interval.

However, the reference of Sato does teach (See fig. 7) a clock source circuit (65) for supplying a sampling clock signal (CLK) to the reception circuit (51) to define time

points for said sampling, the clock source circuit being arranged to adapt a frequency of the sampling clock signal to the timing property of the sync field interval, as a condition prior to supplying the sampling clock signal at the adapted frequency specified by the sync field interval identified by the potential sync break interval. (See col. 8, lines 41-50, 59-62, col. 9, lines 58-62.)

Therefore, it would have been obvious to one of ordinary skills in the art to incorporate this feature into the system of Sato, in the manner as claimed, for the benefit of controlling the sampling frequency.

The reference of Sato discloses the limitations as claimed above, except he fails to explicitly teach the clock source circuit being arranged to search for potential sync break intervals that match the unique bit pattern for a range of bit period values, the clock source circuit verifying for each potential sync break interval whether the sync field interval identified by that potential sync break interval specifies a bit period with a duration so that the sync break interval matches the unique pattern for the specified bit period,

However, Pohlmeyer does. (See fig. 4: 402,424 & ¶ 23-24 & 26-27) Pohlmeyer discloses searching and verifying the validation of break/sync pair sequence by comparing the break character with the synchronization field. And if the break character is greater than the synchronization field value, bit timing information can be extracted from the synchronization character to derive the system baud-rate, and receive data counter is initialized.

Therefore, taking the combined teachings of Sato and Pohlmeyer as a whole. It would have been obvious to one of ordinary skills in the art to have incorporated these features into the system of Sato, in the manner as claimed and as taught by Pohlmeyer, for the benefit of deriving the system baud-rate. (See ¶ 27)

Re claim 3, the combination of Sato and Pohlmeyer further teaches that wherein said unique pattern contains a repetition of a same bit value for more than a maximum number of bit periods during which the same bit value is permitted to be repeated during a remainder of the message. (In Pohlmeyer, see figs 3 & 4 & ¶ 21)

Re claim 5, the combination of Sato and Pohlmeyer further discloses that wherein the clock source circuit operates in parallel with the reception circuit, proceeding with said searching while said reception circuit is sampling bits from the communication signal. (In Sato, see fig. 7: 51 & 65 & col. 8, lines 23-50, 59-65)

Claim 7 is a method claim corresponding to system claim 1. Hence, the steps performed in method claim 7 would have necessitated the elements in system claim 1. Therefore, claim 7 has been analyzed and rejected w/r to claim 1 above.

7. **Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (hereinafter Sato) (US Patent 5,596,582) in view of Pohlmeyer et al. (hereinafter Pohlmeyer) (US 2002/0101884 A1)**

8. Re claim 2, the combination of Sato and Pohlmeyer fails to explicitly teach that wherein supply of sampling clock signals is suppressed after an end of a preceding message until said condition is met.

However, the reference of Pohlmeyer does suggest that if the validation of break/sync pair is not met, bit timing information can not be extracted from the synchronization character and the system baud-rate can not be derived. (See fig. 4 & ¶ 27)

Therefore, it would have been obvious to one of ordinary skills in the art to have incorporated these features into the system of Sato, as modified by Pohlmeyer, in the manner as claimed, for the benefit of deriving the system baud-rate. (See ¶ 27)

9. **Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (hereinafter Sato) (US Patent 5,596,582) in view of Pohlmeyer et al. (hereinafter Pohlmeyer) (US 2002/0101884 A1)**

10. Re claim 4, the combination of Sato and Pohlmeyer fails to explicitly teach that fails to explicitly teach that wherein the clock source circuit is arranged furthermore to verify whether one or more internal intervals between communication signal level changes in said sync field interval have durations corresponding to the bit period specified by the sync field interval as a further condition prior to supplying the sampling clock signal at the adapted frequency specified by the sync field interval.

However, the reference of Pohlmeyer does suggest the validation of the sync character by determining if 5 falling edges are detected.

Therefore, it would have been obvious to one of ordinary skills in the art to have incorporated these features into the system of Sato, as modified by Pohlmeyer, in the manner as claimed, for the benefit of deriving the system baud-rate. (See ¶ 27)

11. **Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (hereinafter Sato) (US Patent 5,596,582) in view of Pohlmeyer et al. (hereinafter Pohlmeyer) (US 2002/0101884 A1)**

12. Re claim 6, the combination of Sato and Pohlmeyer further discloses that wherein the clock source circuit comprises a local clock circuit for generating a local clock signal (In Sato, see fig. 7: 65)

But the combination of Sato and Pohlmeyer fails to explicitly teach a counter means for counting respective first numbers of periods of said local clock signal that occur in the potential sync break intervals and respective second numbers of periods of the local clock signal that characterize the timing property of the sync field intervals identified by the potential sync break intervals and a comparison circuit for comparing each time a combination of the first and a second number of a respective one of the potential sync break intervals and the sync field interval identified therewith, the comparison circuit outputting an enabling signal to enable supplying the sampling clock signal at the adapted frequency when a ratio between the first and second number in a combination is in a predetermined range.

However, the reference of Pohlmeyer does suggest a process in which a slave receiver undergoes in order to achieve synchronization. This is done by comparing the

break character with the synchronization field, and if a validation of break/sync pair is met, bit timing information can be extracted from the synchronization character and the system baud-rate can be derived. (See fig. 4 & ¶ 23-27)

Therefore, it would have been obvious to one of ordinary skills in the art to have incorporated these features into the system of Sato, as modified by Pohlmeyer, in the manner as claimed, for the benefit of deriving the system baud-rate. (See ¶ 27)

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leon Flores whose telephone number is 571-270-1201. The examiner can normally be reached on Mon-Fri 7-5pm Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Payne can be reached on 571-272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LF
November 30, 2007

DAVID C. PAYNE
SUPERVISORY PATENT EXAMINER